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ABSTRACT

The development of a person's perception of himself in a career role is a continuing process which requires constant focus on relevant experiences throughout his entire life. This guidebook was developed to enhance teaching techniques and related media for expanding the vocational awareness of elementary school children. The emphasis is placed on approaches that should enrich the child's understanding of work as a function of man, the importance of the development of man's abilities in relation to the progress of his civilization, and on how the child may relate these to his own individuality. Although this project has been placed within the social studies subject matter area, this approach may be easily adapted to any other area of instruction. A conceptual model of vocational awareness, sample survey questions, instructional units, and activities are included in the guidebook. (CD)

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CAREER DEVELOPMENT



"THE INVOLVED COMMITMENT"

Increasing the Vocational Awareness of Elementary
School Children

A GUIDEBOOK FOR TEACHERS

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STATE OF NEW JERSEY
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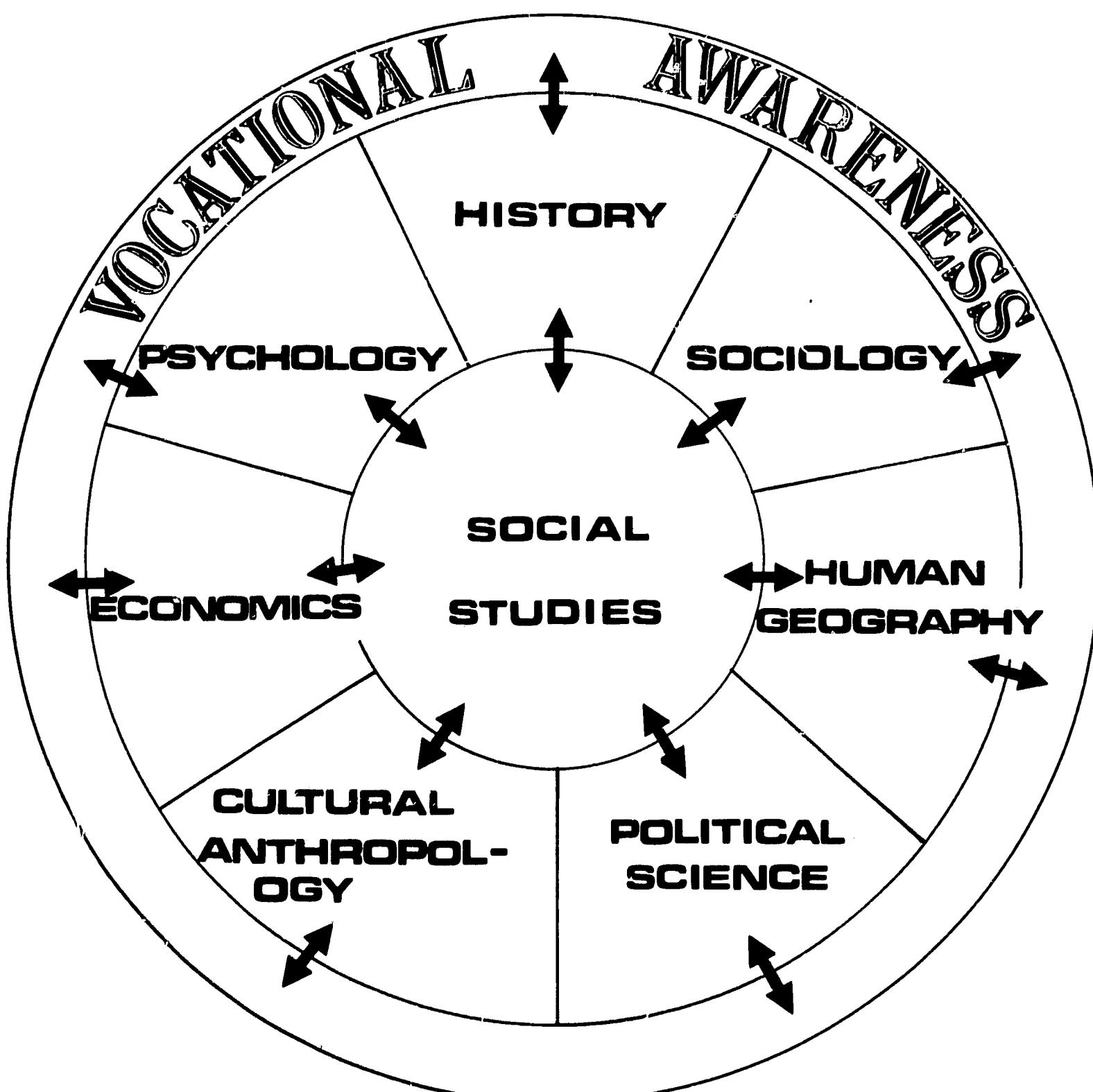
THE WORLD OF WORK: Increasing the Vocational Awareness of
Elementary School Children

. A Guidebook for Teachers and Guidance Counselors .

Thomas W. Gambino
Director of Career Development
July, 1969

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. VOCATIONAL AWARENESS .

Vocational Awareness is an understanding of the significance of man's ability to express himself through a wide-range of work and an appreciation of the contribution of work in contemporary society. Adequate growth of the student's vocational awareness requires that the student be provided opportunities for assessment of work potential, interests and abilities as a continuing life process. With these opportunities provided, he should be able to identify with a career role that is harmonious with his self-knowledge.

F O R E W O R D

A high priority and vigorous commitment of the Division of Vocational Education to citizens of our State, pre-school to adult, is to help provide a climate for learning that would contribute to each person's progress toward the development of his full career potential.

Marvin J. Feldman, Program Officer of the Ford Foundation, stressed the need for broadening foundations for future career choices at a recent conference when he stated: "The failure of vocational education to serve larger numbers is directly related to the fact that the vocational system has no voice in the preparation of students for its programs." Although Feldman in his presentation aimed specifically at students who might be eventually interested in high school vocational education programs, the Division of Vocational Education's interpretation of such a commitment is that all students should be afforded ample opportunities to become acquainted with the world of work. This opportunity must be offered to all students regardless of the type of preparation or the actual timing of career training they may someday pursue.

There are three specific aspects to such a commitment that makes it extremely challenging. First, the problem of developing new programs to meet the rapid growth and changes of the past decade; especially in the technical areas. Second, complex problems caused by social and cultural unrest that further test the ability of vocational educators to develop solutions in terms of training programs. Third, as pointed out by Feldman, a lack of satisfactory approaches and techniques regarding the early school experiences needed for establishing broad foundations for career choices.

Many citizens and educators alike are showing increasingly greater interest in vocational education programs. This makes it possible for many eager New Jersey students to secure skill training as they pursue career choices during their high school years. It is estimated that about 30% of high school students are presently enrolled in formal vocational education programs in New Jersey.

This estimate represents a dramatic increase over the figure of 3% of all high school students enrolled in vocational education programs reported in 1964. The need for such preparation has long been emphasized by business and industry as well as by vocational educators. We have all noted and decried, the useless waste of manpower--especially of the young high school graduates and early dropouts who comprise the bulk of the unemployed and underemployed who enter the work-a-day world without the benefit of training in salable skills.

The Division of Vocational Education wishes to extend its appreciation to Mr. Thomas W. Gambino for his role in initiating and developing an approach for incorporating vocational awareness concepts-vital to the future career growth and development of our young citizens-into the elementary school curriculum.

Robert M. Worthington
Assistant Commissioner of Education
Division of Vocational Education

P R E F A C E

Educators recognize that the development of a person's perception of himself in a career role is a continuing process that requires constant focus on relevant experiences throughout his entire life. Patterns of behavior, of which vocational behavior is an important segment, are established in the pre-school and primary school years. Yet, a study of elementary school texts, occupational materials, teaching techniques and other curricular related media point up serious omissions and inadequacies in meeting the "vocational awareness" needs of students. These serious weaknesses seem to lie in two basic areas; first, teachers generally, are not sure of how to make the exploration an integral part of the ongoing instruction; and second, a lack of comprehensiveness pervades in covering the broad facets of vocational awareness.

The Vocational Awareness Project has been developed to enhance teaching techniques and related media for expanding the vocational awareness of elementary school children. These students should be better prepared to make high school program selection and plan for later career choices. The project attempts to identify and study appropriate techniques, and to develop effective approaches that teachers may use to incorporate "vocational awareness" within the elementary school experience. The findings of this project, developed in cooperation with elementary school teachers, guidance counselors, curriculum coordinators, principals and other educators listed in the directory of participants, are incorporated in this guide for use by elementary school teachers.

The emphases throughout the project has been placed on approaches that should enrich the child's understanding of work as a function of man, the importance of the development of man's abilities in relation to the progress of his civilization, and on how the child may relate these to his own individuality.

This is a first attempt at incorporating vocational awareness, as a new and vital dimension, within an elementary school subject. Although this project has been placed within the social studies subject matter area, this approach may be easily adapted to any other area of instruction, e.g., science, English, mathematics, etc. Other projects currently under development by the Division of Vocational Education are exploring ways of introducing vocational awareness at the upper grade levels in such areas as English, science, art, mathematics, social studies and business education programs.

It is hoped that elementary school teachers and guidance counselors will find this guide a helpful contribution towards expanding the growth of the child's vocational awareness. Elementary school teachers and guidance counselors -- in their joint concern for the vocational development of

each child -- may desire to adapt this guide to the unique needs of any elementary student or class. We welcome your comments, reactions and suggestions for improving and coordinating services between elementary school teachers, guidance counselors and the Division of Vocational Education.

Thomas W. Gambino
Director of Career Development
Division of Vocational Education

A C K N O W L E D G E M E N T

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C O N T E N T S

Foreword	Robert M. Worthington
Preface.	Thomas W. Gambino
Acknowledgement.	Stephen Poliacik
I. <u>Introducing Vocational Awareness - Statement of the Problem and the Rationale.</u>	Page 1

Research concerning the success of the school in preparing our young citizenry for work reveals that a more comprehensive program is needed for attending to the student's growth in "vocational awareness". Experiences that provide a broad foundation from which eventual career choices may be made should be offered throughout the entire schooling process. Such experiences are most critical and have the greatest impact when provided during the early school years. Yet, it is during this early school period that there is the greatest lack of information and direction pertaining to how teachers can attend to growth in vocational awareness.

II. <u>A Conceptual Model of Vocational Awareness</u>	Page 9
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The model identifies broad concepts thus providing the teacher with a frame of reference which he may use as a guide for aiding the student towards more comprehensive growth in vocational awareness. The student, in interacting with the learning experiences recommended within the model, engages in a continuous process of orientation to the world of work. Within this process, a student should develop a clearer perception of himself, his potential, interests and limitations. Further more, he should gain a greater understanding and appreciation of the function of work in our contemporary society.

III. <u>Assessing Growth in Vocational Awareness</u>	Page 12
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Sample survey questions related to the vocational awareness model are made available for the teacher's classroom use. Such questions should enable the teacher to assess the student's level of vocational awareness and serve as an aid in determining directions for further development in vocational awareness.

IV. <u>Vocational Awareness Development Through Unit Planning.</u> .	Page 22
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Four sample Instructional Units are offered in this section which should help demonstrate how vocational awareness concepts may be utilized in enhancing social studies experiences.

V. Activities Having Implication for Enhancing Vocational Awareness Through the Social Studies Setting Page 27

This section describes some of the more commonly used social studies unit activities. These activities should lead to the development of a child's vocational awareness as defined within the operational model.

VI. Teaching About Job Families. Page 33

Job families, or clusters of occupations included within a particular major field, i.e., Health and Medicine; dentistry, dietetics, nursing, etc., are included within this guide in order to provide an easy reference for further investigation by teacher and student.

VII. Summary Page 49

THE WORLD OF WORK: Increasing the Vocational Awareness of Elementary School Children

. A Guidebook for Teachers .

I. INTRODUCING VOCATIONAL AWARENESS - Statement of the Problem and the Rationale

Preparing youngsters for the World of Work is a major goal of American education. A satisfactory and rewarding vocational adjustment holds a high priority in our technologically oriented society. The sequential stages of vocational development must include consideration for the growth of vocational awareness. The concept of vocational awareness must be developed at an early age and hence must be included within the elementary school curriculum. The role and responsibility of the elementary teacher in fostering the development of vocational awareness shall be the major emphasis of this guidebook.

In the Spring of 1964, J. Win Payne, President of the American Association of School Administrators, appointed a special commission to identify major educational imperatives that meet current educational needs. One of the nine imperatives is "To prepare people for the world of work." This particular imperative is based upon the awareness of ever-increasing work changes in our highly automated society.

In considering the changes in the work world, the U. S. President's Committee on Youth Employment has indicated that three hundred thousand jobs are being eliminated each month by automation, and only two hundred thousand jobs are being created.

A 1968 study reports approximately two and a half million students are graduated annually from American high schools. Of these, 53% continue their education at institutions of higher learning. However, only about one half of this group completes their training. About 1,175,000 young men and women, terminate their formal education with high school gradu-

ation. In addition, another 100,000 drop out each year before completing high school. Therefore, over two million students terminate their education at the 12th grade level, or earlier. Only some 400,000 of these students have had some vocational training in high school. The remaining 1.5 million leave school with little or no skills and the labor market offers few opportunities for these unskilled workers.

The choice of an occupation is vitally important to the national welfare. Unrealistic, poorly developed career decisions hinder the individual from reaching his maximum potential and also deprive the nation of needed productivity.

For the individual, there are few decisions that have a more significant impact on his life than the making of career choices. Each student must be made aware of the occupational world. The eventual choice of an occupation can affect all areas of his social and economic life. It can influence his physical and mental health and play a dominant role in determining his values and attitudes toward life in general. Occupational choice may influence family relationships. Careers can affect the manner in which each person speaks, the neighborhood in which he lives, the schools to which his children will go, his dress, and his leisure-time activities.

In spite of the importance of work to the nation and to the individual, today we find a large percentage of our young people preparing unrealistically due to their preference for the more glamorous professional or "status" jobs. This is shown by investigations that have statistically demonstrated discrepancies between the occupational preference of young people and the occupational distribution of our existing employed population. Only twelve in every one hundred individuals in the average community will find their occupational futures in medicine, law, teaching,

nursing, dietetics, engineering, or the other professions. Parents must come to realize that over eighty percent of the young people entering the labor market will be needed in occupations other than the professions. While particular prestige has been attached to education for the professions, other equally important vocations have been given somewhat lower priority and less attention. Such insights as these should induce us, as educators, to provide programs which will foster a broadened understanding of work related to individual interest and the potential skills of all the students.

Why is this message of such great concern to the elementary school teacher? What affect might the experiences that teachers may provide have in reducing some of these problems? Specifically, how do career patterns develop? Action research relating to theories of career development have resulted in concrete recommendations for activities best suited to the later school years -- but as yet, guidelines have not been developed for the elementary years where foundations for future choices are said to be established. This is pointed up by Norris (7) who states:

The 1960 White House Career Conference reports show that vocational decisions have their roots in the primary years. However, little has been accomplished to help point directions or guidelines regarding techniques and approaches that might be used at the elementary level. The need is more urgent today as more and more vocational education programs are offered in the schools. Children need foundations for decisions. (Underlining ours).

Socio-economic level, family structure and background, personality, special abilities, intelligence, physical attributes and other factors

combine to create an impact on the development of the child's behavioral patterns. These forces influence the direction of the child's thinking and affect his interactions with his environment. Additional development of these factors should serve to strengthen the existing school curriculum by making the curriculum more relevant to student need.

Making career decisions is not an objective at an early stage of a child's life. The elementary school child may make what are commonly termed as "tentative choices which will help to motivate him in attaining desired learning". The exploration of such "tentative" career choices provides a climate in which the school may help him to expand his appreciation of his total personality and the world in which he lives.

This exploration of "tentative" career choices is related to the development of self-concept and identity. Dr. Donald Super (11) of Columbia University has written widely on the subject:

In infancy the individual begins the process of forming a concept of himself, developing a sense of identity . . . Exploration appears to be the first phase and a continuing process . . .

In addition, Super (11) concerns himself with the period of "self-differentiation" when the developing youngster imitates others and yet shows differentiating behavior. He reports:

. . . various experiences lead to "role playing" the small boy . . . seeks to emulate his father: in his imagination or in his overt behavior the boy acts as he thinks his father does . . . later on he observes and copies others and tries things that he feels he would like to do or simply to explore.

Perhaps Norris (7) is the strongest supporter of the need for exploration of approaches for an introduction of "VOCATIONAL AWARENESS"

concepts in the early school experiences of students:

Children are influenced by attitudes of people around them. To compound the problems that this generally produces, the typical curriculum does not provide sufficient opportunities (of a vocational awareness nature) for them to explore and develop their potentials. Studies show that by the fifth grade, clear distinctions have been made regarding what is appropriate for them to like and dislike. Most teachers and counselors have middle class attitudes and are more familiar with the professions than they are with clerical, health, sales and skilled and semi-skilled work. Teachers in presenting concepts draw examples from professional levels rather than skilled or semi-skilled areas. Textbooks follow this same pattern.

For the purpose of this guidebook, the concept of vocational awareness shall be defined as follows:

Vocational Awareness is (1) an understanding of the significance of man's ability to express himself through a wide-range of work and (2) an appreciation of the contribution of work in contemporary society. Adequate growth of the student's vocational awareness requires that the student be provided opportunities for assessment of work potential, interests and abilities as a continuing life process. With these opportunities provided, he should be able to identify with a career role that is harmonious with his self-knowledge.

The severity of the problems connected with the preparation of youth for employment, related problems of national productivity and use of human resources are complex and of staggering proportions. Nevertheless, it is more urgent today than ever before that teachers commit themselves to these needs in a realistic and creative manner.

Teachers have long been alert to the need to introduce the "world of work" as an integral part of all areas of learning in the early school years. Their concern for relevancy of school to life gives this practice

a high priority and is usually expressed during the early school years through the exploration of "community helpers". It is generally in this setting that "vocational awareness" emerges as a part of the child's knowledge.

However, one might readily conclude that on the basis of the proportions of the problems pointed up in the earlier statements in this paper that such current practices of teaching children about the world of work are not adequately attuned to the life-long, career decision-making-process concept and the related problems. In fact, it might be stated that current practices can hardly be identified as efforts that are adequate to establish the broad based foundations needed for making appropriate future career decisions.

A review of early-school approaches aimed at enhancing "vocational awareness" as presented in occupational literature, texts, references, audio-visual aids, community helpers studies, reveals that the emphasis is too frequently placed on the "informational" aspect only. This technique represents too narrow a base from which students may become knowledgeable about the function of work in our society and specifically their prospects in becoming productive members.

A program attuned to the vocational awareness of students extending from kindergarten to adult, should address itself to broader, more comprehensive objectives - not just informational services. These may be expressed in the following manner:

To provide students:

- with a foundation for wholesome attitudes regarding the worth and the function of man's work in our society.
- with an understanding of the world of work that would contribute in a constructive way to the development of each one's self-image as a productive member of society.

- with the ability to evaluate individual experiences as these relate and contribute to their eventual career choices.
- with an opportunity to develop self-understanding and an awareness of their personal responsibility for making their own decisions.
- with an opportunity to develop attitudes of respect and appreciation toward workers in all fields and in all levels of work.
- with an understanding of their developing personal interests, attitudes, aptitudes, abilities and skills as they relate to future career decisions.
- with an understanding of the broad range of occupations open to them through education.

To carry out these expressed objectives changes would be required in teaching style, instructional methodology and utilization of classroom materials.

While the teacher would be responsible for creating a climate conducive to the establishment of a broad career foundation, we note a scarcity of materials and techniques that might provide him with the needed direction and support. In other areas of growth and development, i.e., social, academic, physical, emotional, the teacher helps the student by evaluating his behavior and making judgement regarding his progress. On the basis of this "judgement" further work or "next steps" are planned. While we agree that the early years are the most critical for developing a career foundation, we do not have answers to specific questions that would equip the teacher to take similar action in the sequential development of the student's vocational awareness. If we are to help teachers make significant "judgements" pertaining to a student's vocational awareness, we must find answers to the following questions:

- What types of experiences should the teacher provide in an effort to enhance vocational awareness?
- Is there a guide that he might use that may help him assess the student's potential, progress and needs in the growth of vocational awareness?
- How does a teacher determine the level of a student's vocational awareness and how much progress has taken place?
- How can he determine whether his response is appropriate for his age and ability?
- How can he evaluate the effectiveness of his efforts over the years?

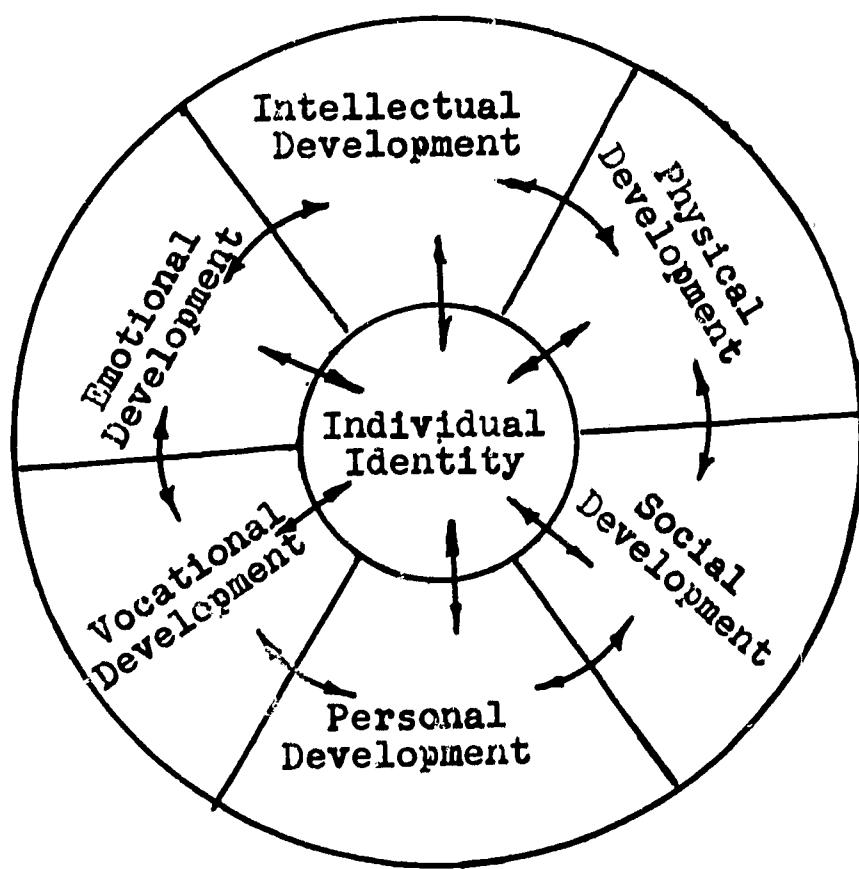
There are very few studies that focus upon these problems. Of the few, little attempt is made to answer such significant questions.

The imperative, "to prepare people for the world of work," is therefore a real challenge. How we help our children grow in vocational awareness will depend upon our commitments as classroom teachers in meeting the total needs of our students.

A necessary first step is to develop a workable "model" of vocational awareness that might be readily applicable to the classroom. Such a guide placed in the teacher's hands should open the door to exploration and experimentation that could lead to meaningful research. Only through classroom research can such significant questions be answered.

II. A CONCEPTUAL MODEL OF VOCATIONAL AWARENESS

How a child perceives himself as a part of his environment is not the result of single acts or experiences but rather the result of a series of events and experiences that represent a developmental process. Growth in vocational awareness does not take place independent of growth in other areas of knowledge and understanding.



Vocational Development is conceived as one aspect of individual development. Like social development, emotional development, and intellectual development, it has both distinctive characteristics which make focusing on it worth while and common characteristics which reveal it as one way in which general development of the individual manifests itself.

(Super,10)

In each of the areas of growth, the most significant factor is the degree or extent of understanding experienced by the child. Many clues are provided by the child regarding his potential, progress and needs. These can be identified by the teacher who is alert to the importance of developmental assessment.

What has been lacking to date is a practical model for the development of vocational awareness which might be readily applicable to the classroom. Once the teacher is equipped with a "workable" model, the conceptual framework may be expanded in the classroom through a variety

of experiences.

The teacher, in essence, provides a learning climate that is conducive to vocational awareness wherein a child gains increasing appreciation of work as it relates to himself and the unique way in which he is able to interact with his environment.

The child in interacting with experiences provided by the curriculum engages in a continuous process of orientation to work. A planned comprehensive program which may offer sequential experiences calls for a "model" that the teacher may use as a guide in aiding the student towards well-rounded growth in vocational awareness. Within this setting, a student is able to perceive himself, his potential, his interests and limitations -- thereby increasing self knowledge in relation to his growth within the various facets of this model.

- (1) Knowledge of differences in skills of different people and his own individuality
- (2) Realization that practice and experience is essential for skill development
- (3) Understanding the relevancy of school to life and work
- (4) Perception of work as a function of man (pride, identity, dignity, status and need of man for skillful and creative expression)
- (5) Knowledge of how the differences in people including such aspects as interests, abilities, health, physical factors and opportunity affect career choices - that each person represents his own peculiar individuality
- (6) Knowledge of the wide range of occupations
- (7) Appreciation of all types of work and the people who do it
- (8) Use of resources (where to get information) and how to study careers

- (9) Knowledge of and the selection of certain occupationally oriented experiences and their sequence and how this contributes to a foundation for career planning
- (10) Willingness to accept his work role and understanding of a person's commitment to make his own choice
- (11) Awareness of changes that will take place in all types of work with advancements in knowledge, phasing out of certain kinds of jobs and the need for continuous retraining to meet job requirements
- (12) Knowledge of influences and pressures of economic, cultural and political aspects of society in life and work
- (13) Knowledge of importance of attitudes and personality factors (social, personal, emotional development) in school and job success
- (14) Ability to identify himself with a career role - develop his self image

The aim within the curriculum is to have the child become capable of carrying out increasingly difficult vocational awareness tasks, independent of the teacher's aid. Within the context of our model, the teacher will be able to observe, measure, evaluate each child's learning experiences affecting his growth in vocational awareness.

The outcome of this growth is the establishment of a comprehensive self image from which realistic career plans emerge.

III. ASSESSING GROWTH IN VOCATIONAL AWARENESS

One of the best and most direct ways for the teacher to find out what the child has gained regarding vocational awareness-through the various learning activities-is to ask questions. Such questions, for discussion, test or written assignment, given at some appropriate point in any unit should be based on the broad aspects of the vocational awareness model.

It is not intended that all the aspects of the model or the following sample questions taken from a unit on Colonial America be covered at any time or in any set sequence. The teacher will use his discretion as to when appropriate questions may be given. This may be prior to, or following the viewing of a film, a unit of study, a field trip or a speaker. Effort should be made however, on the part of the teacher, to cover all facets of the model, repeated in different ways in the course of the year. In this way, experiences will begin to take on greater meaning and relevancy to the individual in accord with his growth in vocational awareness.

The adequacy of the response of the students to the questions, becomes the teachers guide to their individual growth in vocational awareness and determines appropriate directions he should undertake next.

These sample questions based on the model, within the context of a unit on American Colonial Life, may be changed in order to meet the students' level of ability, the level of growth in vocational awareness, and/or the appropriateness of the learning required within the classroom.

SAMPLE QUESTIONS RELATING TO THE MODEL:

1. Knowledge of differences in skills of different people and his own individuality

What kind of work would you have chosen if you had lived during the colonial period? Why would you have chosen this type of work? Why would you avoid certain types of work?

2. Realization that practice and experience is essential for skill development

How long do you think it would take to become an expert worker in the area of your choice? How does one prepare himself for any given type of work? Would you be given difficult tasks to do when starting on a new job? What additional skills might you need to develop in order to advance to a higher level of work in your chosen field?

3. Understanding the relevancy of school to life and work

How does the opportunity to learn in the schools of today differ from that of the Colonial school, (or any other time or place)? In what ways do you think schooling helps towards making occupational choices? What could you learn to be in the special occupational training programs offered in the high school in our community?

4. Perception of work as a function of man (pride, dignity, identity, status and need of man for skillful and creative expression)

What are some of the reasons why people go to work? Why is it that there are changes going on constantly in all areas of man's work - i.e., means of travel, design of clothing, food, homes,

etc.? How does the development of a new way of doing things affect jobs connected with the particular product or service?

5. Knowledge of how the differences in people including such aspects as interests, abilities, health, physical factors and opportunity affect career choices - that each person represents his own peculiar individuality

People have broad skills and abilities and are capable of success in many jobs . . . What are some of the reasons why they select certain specific jobs? What are some of the special abilities needed for success in such jobs?

6. Knowledge of the wide range of occupations

Why is it important to know about the many different kinds of jobs? What are some of the things you should know about jobs? Would it be more difficult to choose an occupation today than during the Colonial period?

7. Appreciation of all types of work and the people who do it

What are some of the occupations that aid us in our play, leisure time activities and everyday living? Are there some jobs that are more important than others?

8. Use of resources (where to get information) and how to study careers

If you wanted to learn more about an occupation, how would you go about it? What are some of the things that you have done to date to learn about different careers? Do you know what your father's and mother's occupations are? Other relatives and friends?

9. Knowledge of and the selection of certain occupationally oriented experiences and their sequence and how this contributes to a foundation for career planning

What are some of the things that you do day by day, year by year, that might help prepare you for what you want to be in the future? What are some of the opportunities that you might find in high school to help you to prepare for the work you will do some day? What training opportunities are there after high school? Once you get a job, how do you progress or change to other levels or areas?

10. Willingness to accept his work role and understanding of a person's commitment to make his own choice

Do you honestly feel that you want to hold a job someday? How would you feel if the opportunity to make your own career choice was taken away - that your job was assigned to you by some special government agency? (Assign people to certain jobs). Will you always be free to make your own career choices?

11. Awareness of changes that will take place in all types of work with advancements in knowledge, phasing out of certain kinds of jobs and the need for continuous retraining to meet job requirements

What are some jobs people are doing today that were not done during Colonial times? What new jobs have developed in the last decade? Do some jobs give you greater security than others?

12. Knowledge of influences and pressures of economic, cultural and political aspects of society in life and work

Why did people during the Colonial period work on farms? How does this compare with today? Why did people come to this new land? What might cause you to sometimes take a job in which you have no interest?

13. Knowledge of importance of attitudes and personality factors (social, personal, emotional development) in school and job success

How important is it to get along with people in school and on the job?

14. Ability to identify himself with a career role -- develop his self-image

Considering your present career choice, why do you feel that you will be successful? In what way might your career choice help you live the kind of life you want? Is what you feel you are as a person today related to what you wish to become? What might determine whether you get satisfaction through your job choice?

SAMPLE CLASS DIALOGUE RELATING TO THE MODEL:

Area of Discussion: The Founding of Jamestown

1. Knowledge of differences in skills of different people and his own individuality

Teacher: Having seen the filmstrip on life in early Jamestown, could you name some of the jobs of the early colonists.

Fred: I noticed the builders, the farmers, tailors and a doctor.

Teacher: Did some jobs seem to be more appealing than others?

Fred: I liked the doctor's job. I'm learning First Aid in our Cub pack, and I find it to be interesting.

2. Realization that practice and experience is essential for skill development

Teacher: How did the colonial boys and girls learn to work?

Bruce: Well, they had to be around the skilled craftsmen. The boys would have become trade apprentices, and the girls would have learned their skills in the home from their mothers.

3. Understanding the relevancy of school to life and work

Sally: With the founding of Jamestown, were there schools for the children to go to?

Teacher: Education, for the most part, was accomplished in the home by the children's parents.

Sally: It was very important to learn to read so that the children could study the Bible.

Teacher: Here was a definite need for learning to read. Can you think of some needs we have today that were not necessities during those early days at Jamestown?

4. Perception of work as a function of man (pride, identity, dignity, status and need of man for skillful and creative expression)

Teacher: How did the ability of the men and women to work fulfill the needs?

Bill: They designed and built homes, boats, planted crops and preserved food.

Bill: People who could do their jobs well gained the highest respect of the community.

5. Knowledge of how the differences in people including such aspects as interests, abilities, health, physical factors and opportunity affect career choices - that each person represents his own peculiar individuality.

Teacher: Is it true that our modern time has more needs to meet which require a greater number of jobs, professions, etc.

Roger: I guess picking the right job could be a real problem for many people.

Teacher: What problems might you consider, Roger?

6. Knowledge of the wide range of occupations

Robert: What kind of work was there to be done in Frontier America?

Teacher: If you found yourself, Robert, with John Smith and his early settlement, what would be some of the survival jobs.

7. Appreciation of all types of work and the people who do it.

Bill: In order for Jamestown to survive as a community, all meaningful tasks were essential, and, therefore, they were worthy of some kind of respect.

Teacher: Don't you think it is important today to have appreciation for work?

8. Use of resources (where to get information) and how to study careers

Tom: Farming has come a long way since the early days at Jamestown. My library book tells about all the different inventions which have made farming easier today.

9. Knowledge of certain occupationally oriented experiences and how they contribute to foundations for career planning

Sally: Maybe if the Jamestown community had had a scouting program, it would have helped some boys and girls learn more about agricultural careers through a merit badge program.

Teacher: Were there many careers in agriculture at that time, class?

10. Willingness to accept his work role and understanding of a person's right to make his own choice

Bob: John Smith had the right idea when he stated that only the men who work will eat. Everyone had to cooperate then.

Teacher: Do you think the reluctant men were happy about this decision?

Bob: No, they didn't like that type of work and had a poor attitude toward the whole idea.

Teacher: Do you think a proper attitude toward work is essential?

11. Awareness of changes that will take place in all types of work with advancements in knowledge, phasing out of certain kinds of jobs and the need for continuous retraining to meet job requirements

Larry: When you consider the changes in building homes since Jamestown, you begin to wonder about the changes that will take place in the future.

Teacher: What kind of changes do you think will take place in the future?

12. Knowledge of influences and pressures of economic, cultural and political aspects of society in life and work

Bill: Not all people today have adequate housing. There still are many slum areas in our country.

Teacher: What could be done to correct this unfortunate situation?

13. Knowledge of importance of personality factors (social, personal, emotional development) in school and job success

Bill: John Smith must have been quite a leader in order to control his people in such a frontier as Jamestown.

Teacher: What kind of a man would you picture John Smith? What would be some of his leadership qualities?

14. Ability to identify himself with a career role - clarify his self-image

Michael: If I were with John Smith, I think I would have liked to have been the cook. I would be sure to get something to eat.

Teacher: Let's check with the rest of the class, Michael, as to what their preferences might be.

Being aware of these cognitive abilities will enable teachers to concentrate on classroom dialogues that will encourage greater vocational awareness. The degree of understanding or awareness as illus-

trated in the questioning technique and the dialogue above, will vary from child to child depending upon his experiences, capabilities and age. It is the responsibility of the teacher to recognize his level of understanding and to provide opportunities that would lead the child to more comprehensive knowledge to enhance his growth in vocational awareness.

IV. VOCATIONAL AWARENESS DEVELOPMENT THROUGH UNIT PLANNING

The following excerpts may demonstrate to the teacher how vocational awareness is readily incorporated as a vital dimension within any given social studies unit.

For the purpose of this guidebook, only the vocational awareness segment of the unit plans is given below. It is assumed that the teacher will wish to expand the other facets of content in his own way.

The following topics have been selected for demonstration:

- A. Stone Age Cultures
- B. Living in a Medieval Town
- C. New England Study
- D. Tourist Trade of Switzerland and Austria

The accepted form; goals, methods, and evaluation, represents the format of the sample units. In many instances, goals for one unit are appropriate for another, however they shall be listed only once. Methods are always adaptable to various situations. As an aid in the evaluation of student growth in vocational awareness, it is suggested that the teacher weigh student responses within the context of the model. The teacher may wish to refer to Section III -- Assessing Growth in Vocational Awareness, for suggested procedures.

Stone Age Cultures

I. Goals:

1. To appreciate the problems of the early aborigines in finding a suitable environment for living.
2. To appreciate the simplicity of their living utensils and weapons in contrast to today's complex modern living.
3. To appreciate the evolution of certain primitive occupations.

4. To understand the relationships among various occupations.
5. To develop a healthy respect for the various occupations.

II. Methods:

1. Show classes artifacts found in New Jersey. These are obtained from community museums or private collections.

Students enjoy seeing and feeling such items as stone axes, mortar bowls, arrow heads, drill points, scrapers and spear points which were made by the aborigines of our State. As students examine the various items, they will ask questions involving the methods employed in making them and the uses made of them. A class may visit exhibits of collections. They may interview collectors. Finally, they may engage in personal exploration of their own immediate environment for Stone Age artifacts, even in urban areas where excavations take place. The book: How to Surface Hunt for Stone Age Artifacts, offers students procedures for surface hunting.

2. Discuss contemporary occupations that would relate to occupations of early cultures.

The artifacts discussed above would indicate the primitive occupations that were essential for existence. The arrow heads and spear points would suggest the need for skilled craftsmen. The need for hunters would be evident to the students. Mortar bowls would suggest the necessity for cooks, drill points for sewers and scrapers for butchers.

III. Evaluation:

Assessment of growth in vocational awareness may be determined as suggested in Section III of this guide.

Living in a Medieval Town

I. Goals:

1. To enlarge understanding of the variety of vocations needed to satisfy daily needs.
2. To develop understanding of the training needed to become master craftsmen.
3. To compare the training needed today to that of Medieval times.
4. To emphasize the standards and personal goals of workers.

II. Methods:

1. Group discussion - Consider types of jobs available in Medieval towns. List on the board. Some might be weaving, cabinet making, silversmithing, baking, blacksmithing, tailoring, butchering, tanning, candle making, etc. Consider comparable jobs today.
2. Compare kinds of equipment used today with that of Medieval Times. Collect news or magazine ads showing modern home appliances. Find picture or descriptions of early methods.
3. Discuss daily living now if there were no iron and steel, coal or electricity.
4. Have the class produce a skit based on Medieval jobs.
5. Use available film such as "Life in a Medieval Town" by Coronet.
6. Use available film strips as "New Processes," "New Inventions", "Natural Resources," by Eye Gate House.
7. Have your own Medieval town fair.
8. Visit modern day craftsmen at work. (Glassblower, cabinet maker, etc.)

III. Evaluation:

Assessment of growth in vocational awareness may be determined as suggested in Section III of this guide.

New England Study

I. Goals:

1. To develop an awareness of the geographical determinant of occupations.
2. To develop a meaning of vocations.

II. Methods:

1. Discuss the varied opportunities for particular vocations in the New England area.
2. Make product maps and trace back the occupations through the products.
3. Guide the group in role playing various vocations.

(Adapt methods suggested in other units and refer to Section V of the Guidebook for activities which would be appropriate.)

III. Evaluation:

Assessment of growth in vocational awareness may be determined as suggested in Section III of this guide.

Tourist Trade of Switzerland and Austria

I. Goals:

1. Understand how these countries have overcome handicaps and became prosperous.
2. To understand the implications of tourism to the economic welfare of a country.
3. To understand the need for occupations relating to transportation, lodging, food and entertainment.

II. Methods:

1. Show film such as "Switzerland and Austria". This shows how these countries, faced with rugged mountains, few minerals,

no seacoast, and mixed cultures have made their spectacular scenery a profitable asset.

2. Show pictures in "National Geographics" which depict many occupations available for a Swiss or an Austrian.
3. Guide discussions: What attracts tourists to these countries? What have the Swiss done to overcome their handicaps? What are some famous Swiss and Austrian manufactured products? What job opportunities would there be? What are some character traits do you think people should have in order to be good citizens of their country?
4. Prepare a program of folk songs and dances.
5. Exhibit products and handicrafts.
6. Listen to music composed by the musicians of these countries.
(Refer to suggestions in other units and Section V of this Guidebook for activities that would be appropriate.)

III. Evaluation:

Assessment of growth in vocational awareness may be determined as suggested in Section III of this guide.

V. ACTIVITIES HAVING IMPLICATION FOR ENHANCING VOCATIONAL AWARENESS THROUGH THE SOCIAL STUDIES SETTING

This section of the guide describes vocational awareness oriented activities that the teacher may relate at his own discretion to the social studies unit.

A. Using Students' Abilities and Interests

Identifying the strengths of students will aid in planning subsequent learning activities. A teacher can capitalize on the children's hobbies, interests and skills which are related to occupations. Preparing an interest and abilities profile record on each child will enable a teacher to utilize the available resources already established within a given class. Such hobbies and interests as model car making, stamp and coin collecting, sports, art, crafts, photography, astronomy, interviewing, writing, and dramatizing can be a classroom starting point for developing vocational awareness. Given the opportunity to express these varied abilities and interests within the social studies experience represents a supportive motivational factor already inherent within the students themselves.

B. Local Places Survey

As the children consider the different units of social studies, they will recognize such concepts as "interdependent community living." They will realize that man depends on others for his living standard, needs, well being, etc. One possible activity would be the listing of all the enterprises that are found in the community. The children could report to their classmates their findings and tell how the various enterprises contribute to the well being of all of the citizens living in a community.

C. Resource People Survey

(1) Compiling a list of people in the community or nearby towns who can be interviewed, or called upon as guest speakers will not only help children learn about work, but will relate the job or industry to people they "know." Teachers can start with their immediate work environment, members of the faculty, the principal, and the maintenance personnel readily available for interviews.

(2) The Yellow Pages of your telephone book and the advertisements in the newspaper can be valuable guides to local businesses, schools and professional people. The survey alone will give children a knowledge of the community's involvement.

D. Guest Speakers

Having a list of guest speakers representing different occupational activities found in the community would enable the classroom teacher to present qualified people to their students. Their presentations and follow-up discussions with the children would represent an effective method for providing vocational awareness. Students may wish to develop a directory of resource people whom they can contact at some later time for further information or with whom they could visit and watch at work.

E. Literature and Places to Write Survey

(1) Since researching information is a common aspect of social studies, pupils can compile bibliographies of stories, books, magazines, trade publications, etc. in fulfilling a given need within their units of social studies. Teachers can encourage pupils to discover for themselves, for example, as many topic related occupations as they can within

a given unit of study. One particular activity would be a game of who can find occupations that no one else did. Another activity would be to trace the origin of some of the essential professions and occupations needed today. The imaginative teacher will be able to use their type of social activities in many of the units of studies.

(2) The students can locate addresses of the Chamber of Commerce, labor organizations, manufacturing plants, schools and county extension service offices, government services, etc., from which additional written information or even capable speakers may be requested. This activity as well as the one above can promote improved library skills, reading tables of contents and indexes, writing bibliographies and letter writing techniques.

F. Pupil Booklets

Pupil booklets can be an organized compilation of material and information reflecting the aims of vocational awareness. A pictorial study of man's past and present environment, endeavors for food, housing, protection and recreation would illustrate the vocational aspects of cooperative living. Many other areas suggested in this section readily lend themselves to topics that may be incorporated in booklet form. Also, many students may have talents that may be expressed through models, mock-ups or drawings.

G. Photography as a Survey Technique

Students, having an interest in photography, can collect slides or enlargements showing local people at work as well as the tools and equipment they use. A classroom display of such illustrations will help the

children to view and discuss the occupational areas necessary for community living.

Many students will have opportunities to visit other areas within and outside our State, thereby providing more available places for photographic surveys.

H. Identification with Other Times and Places

Teachers can provide comparative learning activities by having their children make contrasting studies of man's occupational efforts. An example of this would be a study of modern agriculture in the U. S. in relation to the early colonial agricultural status.

Students in another comparative study may enjoy playing soldier by having an imaginative "Revolutionary soldier" interview a modern soldier of today, asking him questions regarding food, guns, communication, mode of travel, occupations in the army, etc. In another "comparison" situation the students may role play a Brazilian farmer talking with an American farmer. Such activities reflecting change and differences of time and place will enable the children to realize that when today's 5th and 6th graders are ready to work, they will find the world different from what it is at present. What changes can be foreseen might be a good topic of discussion.

I. Dramatization

Role playing is a valuable technique in having students project themselves as different people reflecting time and place. Children can gain insights as to the setting of the stories to be projected as well as the social, economic and political aspects which may arise from time to time. The children may wish to project themselves as statesmen,

merchants, sailors, nurses, etc. in dramatic skits. Vicarious experiences such as these help children to broaden their perspectives of the world about them and, at the same time, enable them to "see themselves" in an "imaginative environment".

J. Field Trips

Teachers can encourage their students to be attentive to the occupational aspects of any class trip. If students would observe people and what they do in the work world, they would have ample opportunities to consider the wide range of occupations. From class trips, students' interests may be motivated toward specific vocational studies. One student may wish to focus upon occupations associated with types of transportation, another communication, etc. The interests of students naturally will differ, it will be a challenge for the teacher to guide the children along their various paths of interests.

K. Audio Visual Materials

The availability of audio-visual aids does enable teachers to select films, filmstrips, etc., which would project a vocational awareness aspect of man's creative endeavors within his given environment. Through these aids, children can see different people living in "a given environment at a given time". A filmstrip on life in the Stone Age, for example, will allow students to see man's efforts in getting food, protection, and shelter. From this viewing, discussion can be had concerning the vocational aspects.

The selective use of commercial television also is a worthwhile source for developing vocational awareness. Since there are programs which feature man in various occupational roles, teachers can choose or recommend certain ones with purpose of supplementing the classroom's

educational program.

Some teachers and students may wish to make slides, film, videotape, drawings, models, etc., for later viewing and discussion. Bulletin boards, displays, exhibits, demonstrations, etc., would open other areas for students to express individual abilities and interests and expand avenues of learning.

VI. TEACHING ABOUT JOB FAMILIES

Many subjects are devoted to an understanding and appreciation of how man lives, interacts with others and grows to maturity. Although any subject can therefore deal with people and their job behavior, the social studies areas tend to represent logical placement for units about the teaching of jobs and job families. For this reason, the placement of this unit of instruction has been made within the social studies.

The occupations a teacher may select for pupil exploration are virtually limitless. The Dictionary of Occupational Titles, Third Edition, Lists 21,741 individual occupations. Before selecting a specific occupation for study, the teacher should consider the following rules:

- A. Select occupations which can bring into focus the interests, abilities, specific skills and cultural background of the students in the class.
- B. Select occupations which may be suggested by the students during a lesson, field trip or unit of study.
- C. Select occupations which may be of interest or within the experience of the teacher or other faculty members.
- D. Select occupations which may prevail within your geographical area.
- E. Select occupations which are indicated within your instructional unit in Social Studies.

Young people must be exposed to a total view of the world of work if they are to gain a broad vocational background. It would be impossible to study all of the approximate 21,000 different occupations. However, by following the indicated rules and by dividing the numerous

occupations into related categories, it is possible to study an adequate and representative sample.

There are several ways in which occupations may be categorized. For example, occupations may be broadly divided into agriculture and non-agriculture groups. At the turn of the century, agriculture employed approximately fifty percent of the total work force; today it claims less than eight percent.

Another approach to the classification of occupations is to separate them into goods-producing and service-producing industries. Goods-producing industries include manufacturing, agriculture, construction, and mining. Service-producing industries include trade, government, transportation, public utilities, finance, insurance, and real estate. Today there are more workers in service-producing areas than there are in goods-producing industries.

Developing work-trait classifications, as indicated by the Dictionary of Occupational Titles, is yet another study approach. Each group represents some combination of the following traits: general educational development, specific vocational preparation, aptitudes, interests, temperaments, and physical demands.

Occupations may also be divided into interest-area groupings, as found in the Kuder Preference Record, Vocational Form. This inventory of interests classifies into ten major interest areas, outdoor, mechanical, computational, scientific, persuasive, artistic, literary, musical, social services, and clerical.

The occupational grouping set forth by the Occupational Outlook Handbook, published by the Department of Labor, represents an excellent resource manual that the teacher may utilize. Other references listed

in the bibliography would be more suitable for fifth and sixth grade students.

The Occupational Handbook sets forth the following groupings:

Professional and Related
Managerial Occupations
Clerical and Related Occupations
Sales Occupations
Skilld and the Other Manual Occupations
Manufacturing
Government
Service
Agriculture
Transportation, Communication, and Public Utilities
Construction
Finance, Insurance, and Real Estate
Mining

Although the discussion deals with occupations in the categories suggested above, it is important to keep in mind the inter-dependence world of work. Stress is placed on the inter-dependence of people, the inter-dependence of nations, and therefore the inter-relatedness of work must be emphasized. The class may take a finished product and trace it from the raw materials - to its use, to realize the many occupations that are involved.

There are provisions for enriching study by offering opportunities to explore in depth, the role of people. These may be readily illustrated in this typical social studies outline. Topical Outline: Any state, country, or region.

I. The Land and its Resources

- A. Location, Size, and Surface Features
- B. Climate
- C. Soil
- D. Minerals
- E. Forests
- F. Water Power

II. The People and Their Work

- | | |
|------------------|-------------------------------------|
| A. The People | G. Forest Products |
| B. Way of Life | H. Fishing |
| C. Cities | I. Transportation and Communication |
| D. Agriculture | J. Trade |
| E. Manufacturing | K. Special Industries |
| F. Mining | L. Clothing |

III. Social and Cultural Achievements

- | | |
|--------------|-------------|
| A. Education | C. The Arts |
| B. Religion | D. Science |

IV. Government

V. History

The topics shown in the above outline offer almost limitless opportunities for investigation. Choosing one of the topics; i.e., CLOTHING, we can show how it can be expanded to include people in their work roles.

Industry: Clothing Production

Job Opportunities

Designers	Floor girls (supply materials)
Buyers	Inspectors
Pattern Makers	Pressers
Cutters	Managers
Spreaders	Sales Personnel
Shop Foreman	Sample Makers
Models	Line Girls (operators skilled in all machines)
Operators (skilled on one machine)	Mechanics (maintain machines)

The above breakdown of jobs within a single industry of an industrialized society shows that many interrelated occupations exist. The pupils might make similar search for other job families and then study a few of the jobs intensely. In this case, the designer, pattern

maker, line girl, presser, and sales person might be chosen. In this manner, the topic CLOTHING becomes people that children can meet and talk to, and places in the community to visit.

The following pages show a partial breakdown of occupations within a few selected job families. The interested and imaginative teacher will find numerous occasions to use the lists to present occupational information for the development of vocational awareness, within the framework of existing school programs.

OCCUPATIONS IN AGRICULTURE

Agriculture is more than raising corn, milking cows or growing apples. Under the broad title of Agriculture is found the Veterinarian who keeps the farmer's live stock, and incidently, the family dog or cat, in good health. Men who study soil conservation are valuable to us. They direct the farmer in the proper development of the soil so that good production is maintained. They also are concerned about flood control, erosion, cover crops, and fertilizers. Another specialist is the Entomologist, who is concerned with control of insects and growths that might destroy corps. Homeowners depend on him for flower, tree and garden sprays.

The Crop Picker, the Field Hand and the handler of today's complicated field machinery, as well as the Tree Surgeon, are also people who contribute to our nation's standing in respect to food production.

Not to be overlooked as other areas of Agriculture are the jobs in Forestry and Forest Products, Fishery Industry and Food Processing including preserving and freezing of foods.

The man who manages the vegetable department in the supermarket, the Florist, the local Nurseryman from whom you buy plants and flowers for your home, as well as the gardner, are also people who come under the broad title of Agriculture.

Using the approaches suggested elsewhere in this guide describe the work of the people listed below. How many additional ones can you list? How many can you find in your community?

Aerial Applicator	Caponiser
Agricultural Economist	Cattle Dehorner
Agricultural Professor	Cream Grader
Agricultural Statistician	Dairy Fieldman
Agronomist	Entomologist

Farm Manager	Moss Handler
Feed Specialist	Nutritionist
Field Inspector	Orchardist
Fire Fighter	Park Supervisor
Fishery Manager	Plant Breeder
Floral Designer	Plant Geneticist
Florist	Phytochemist
Food Inspector	Pomologist
Forest Ecologist	Poultry Culler
Forest Ranger	Sawmill Operator
Greenhouse Manager	Seed Sorter
Landscape Architect	Smoke Jumper
Landscape Nurseryman	Soil Analyst
Livestock Buyer	Transplanter
Log Scaler	Tree Budder
Lumberman	Tree Surgeon
Machinery Salesman	Veterinarian
Meat Grinder	Wildlife Specialist

COMMUNICATIONS INDUSTRY

The communications industry offers a vast reservoir of a variety of occupational areas. Some of the vehicles for communication include books, newspapers, radio, telephones, recordings, television, and motion pictures. Brief descriptions of occupations in the telephone and television industry will illustrate the occupational potential in the communications industry.

More than 300 million telephone calls are made daily in the United States which involve local calls, calls to various parts of the country, and calls overseas. More than 700,000 employees are required to provide this service. One-third of these workers are employed in construction, service, and maintenance activities. The central office Equipment Installers set up complex switching and dialing equipment in central offices, while Linemen and Cable Splicers connect wires and cables from the central offices to the homes. Telephone Installers place and remove telephones from homes, PBX Installers specialize in the more complex switchboard installations. Central Office Operators,

Long-Distance Operators, Information Operators, Chief Operators, directly and indirectly assist the caller.

The television industry has produced a host of new and interesting occupations since its inception. For example, the costumer is the person who selects and fits clothes for the members of the cast. The Lighting Technician is responsible for the positioning and operating of the lights during the broadcast. The Videocamera Engineer handles the photographing of the broadcast, while the Camera Assistant pushes the television camera dolly into position. The Teleprompter types the television script into the teleprompter and operates the teleprompter during the broadcast. The Master Control Supervisor is responsible for the time schedule of the broadcast and is concerned also with the quality of the picture and sound.

Listed below are some other occupations found in the communications industry:

Actors	Light Technician
Announcer	Newspaper Carrier
Audio Engineer	Newspaper Reporter
Composing Machine Operator	Page Boy
Copyright Expert	Producer
Director	Publishers
Disc Jockey	Screen Reporter
Disc-recording Machine Oper.	Script Reporter
Editor	Sound-effects Technician
Film Editor	Spiral Binder
Foreign News Translator	Tape-recording Machine Oper.
Gag Writer	Typesetter

OCCUPATIONS IN CONSTRUCTION

Ever since the time that man left his cave and began to build his own shelter, he has constantly sought ways to improve his ability to build houses and other structures. Today the construction industry involves the building of homes, factories, hospitals, schools, bridges, dams, roads, etc.

The planning of a structure usually begins with the work of the Architects, Engineers, and Contractors. The Bulldozer and Power-Shovel Operators have a responsibility to gouge out, level, and distribute land. In large buildings the Riveter and the Welder-Fitter help to lay the foundation for the structure. The Bricklayer helps to give the structure its form by placing in the necessary concrete blocks, and bricks. The job of the Construction Electrician involves laying out, assembling, installing, and testing of electrical fixtures, wiring, and other apparatus needed in the home. The Carpenters, Painters, Paperhangers, Plumbers, and Pipefitters all play a vital role in the construction of homes and buildings.

Most building trades workers belong to unions that bargain with employers on wages, hours, and such benefits as health insurance and pensions.

In many trades the person starts as an apprentice or helper, advances to journeyman, and finally, in some trades, becomes a master. An apprentice who learns, according to an oral or written agreement, a recognized skilled trade, requiring two or more years of on-the-job training, plus related instruction. A journeyman is a skilled worker who has completed successfully an apprenticeship and is qualified to practice his trade or craft. A master is a worker who has obtained a high degree of skill in his trade or craft, and who employs or supervises journeymen or apprentices.

Here are some other occupations that deal with construction:

Architect	Cement Masons
Asbestos Worker	Chimney Repairman
Bricklayer's Tender	Civil Engineer
Building Contractor	Crane Operator
Building Laborer	Electrical Engineer
Building Wrecking Foreman	Floor-covering Installer

Foreman
Glazier
Hoister
Janitor
Landscape Contractor
Marble Setter
Porter
Rigger and Machine Mover

Rodman
Sanitary Engineers
Structural - Iron Worker
Structural - Metal Worker
Telephone Installer
Tile Setter

OCCUPATIONS IN FINANCE, INSURANCE AND REAL ESTATE

Financial institutions are concerned with operations of building and loan associations, installment and personal finance companies, security brokers, security dealers and holding companies.

Insurance covers occupations including operations of all types of insurance companies covering home and branch offices. Primarily they are concerned with the sale and preparation of insurance contracts, administration of insurance organizations and maintaining records. Principal types of insurance include accident, health, casualty, fidelity, and surety bonding, fire, liability, life, marine, and theft.

Real Estate covers the operation of various types of real estate offices and the functions of agents, brokers, and dealers. Major areas include real estate development, management, rental of property, buying and selling of buildings and land.

Banking represents the first area of finance with which the school youngster might come in contact. His first experience may be one of happiness when the attendant at the drive-in window gives him a lollipop. He sees mother put money or a check in the little door that is flipped open. This is usually followed by a visit to the store to buy needed groceries or clothes or to pay bills. He knows that there is a certain time during the month when father is not to be disturbed -- he is making out the checks for the bills that have accrued.

He does not see the work of the bank Statistician, the Accountant, the people connected with special checking accounts, savings account services, installment and mortgage loans; jobs in connection with safe deposit boxes, letters of credit, charge accounts in retail stores; the Lawyer, Economists, as well as Bank Guards, Elevator Operators, Cleaners who contribute to the total banking operation.

People would be found serving in such jobs as:

Account Analyst	Commodity Loan Clerk
Accounting Clerk Pay Roll	Credit Analyst
Advise Clerk	Foreign Exchange Trader
Bank Cashier	Insurance Clerk
Bank President	Loan Counselor
Bond Analyst	Mortgage Advisor
Bond Clerk	Reserve Officer
Bond Trader	Safe Deposit Box Bookkeeper
Checking Clerk	Savings Bond Clerk
Christmas Club Bookkeeper	Securities Clerk
Clearing House Clerk	Securities Trader
Coin Counter	Teller
Coin Separator	Vault Attendant
Coin Wrapper	Vice President

OCCUPATIONS IN GOVERNMENT

Occupations in government involve much more than the familiar Postman, Fireman, and Policeman. Almost one out of every six civilian workers is employed in government service. Approximately three-fourths of these workers are employed by the state and local governments, and the rest are employed by the federal government. All play vital roles, without which our communities could not function.

Perhaps the most familiar government employee to the student is the Teacher. Included in the educational area are the Principal, Counselor, Librarian, Dietitian, Janitor, Clerical Workers, School Nurse, etc.

In protective services occupations besides the Policeman, are found the School-Crossing Guard, Detectives, Policemen, Sheriffs,

Judges, and even a Bomb Disposal Man.

Other vital occupations that are concerned with the health and safety of the community include the Health Inspectors, Building Inspectors, Road Construction and Maintenance Workers. Garbage Collectors provide an invaluable service. Besides the familiar Fireman, included in this area are such occupations as Fire Apparatus Inspector, Firebox Man, Fire Control Technician, Fire Hose Curer, Fire Inspector, Fire Chief, and Crash Fire Fighter. The Playground Supervisor is also a familiar figure to the young person. Local government officials, such as the Mayor, and members of the City Council are all employees of the government.

Not to be forgotten are the people who work for the State and Federal governments and the people who serve in the Armed Forces. The variety of jobs is almost endless; from State Highway Patrolmen, State Health Inspectors to members of the F.B.I., agents of the Central Intelligence Agency, Immigration Inspectors, to the President of the United States.

Listed below are some government service occupations that might be worth investigating. The list may certainly be extended.

Ambulance Driver
Assessor
Auditor
Border Patrolman
Building Inspector
Census Clerk
Child Care Attendant
Civil Service Clerk
Coroner
Court Clerk
County Agricultural Agent
Forest Fire Fighter
Game Protector
Highway Maintenance Man

Meter Maid
Parcel Post Carrier
Park Ranger
Patent Clerk
Sanitary Inspector
Snow Plow Operator
Special Delivery Messenger
Special Agent, F.B.I.
Toll Collector
Town Clerk
Traffic Engineer
Warden
Weed Control Supervisor

SERVICE OCCUPATIONS

The Teacher will find that this area includes broad categories. Under Health Services are listed such people as Dentists, Dieticians, Medical Record Librarians, Medical Technologists, Physicians, Speech Pathologists. In another area of service occupations are such people as F.B.I. Agents, Firefighters, Policemen, Cooks, Chefs, and Barbers.

Since the intent in this guide is to demonstrate how an area of Social Studies can be developed to focus on people, the illustration will include the area of Service Occupations through Health Services only. Other areas of Service Occupations can be developed as needed.

A favorite of most youngsters is the Family Doctor. In severe cases, he comes to the house, or mothers take their children to his office. Injections are sometimes painful and the prescription he scratches out on a special sheet of paper may lead to some distasteful medicine, but children generally find these visits somewhat pleasant, at least in retrospect.

Youngsters come to the realization that the Doctor relies on the Nurse for certain things that must be done. A stay in a hospital brings to light the fact that many other people are at work to attend to his health, comfort and general well being.

Who are these other people? Some of the equipment is so complex; what special preparation do men need to operate it? Are the portrayals of men and women that are seen on "doctor" television shows representative of what really happens?

People in Medicine and Health Occupations:

Biologist
Chemist
Chiropodist
Dental Assistant
Dental Hygienist
Dentist

Dietitian
Food and Drug Inspector
Food Service Supervisor
Food Technologist
Histologic Technician
Hospital Administrator

Hospital Service Worker	Orderly
Industrial Hygienist	Osteopath
Inhalation Therapist	Pharmacist
Medical Artist & Photographer	Physician
Medical Librarian	Physiologist
Medical Secretary	Psychiatrist
Medical Social Worker	Public Health Administrator
Medical Technologist	Radioisotope Technician
Nurse, Practical	Safety Engineer
Nurse's Aide	Sanitary Engineer
Nutritionist	Veterinarian
Occupational Therapist	Vocational Rehabilitation Counselor
Optician	X-Ray Technician
Optometrist	

OCCUPATIONS IN TRANSPORTATION

The transportation industry offers a variety of occupations dealing with automobiles, buses, trains, ships, and aircraft. Children are familiar with the Railroad Conductor, the Taxi Driver, and School Bus Driver. However, there are many other occupations directly and indirectly related to the transportation world.

Starting with the most familiar occupation concerning the automobile would be the Service Station Attendant and the Automobile Mechanic. Included also are such occupations as Chauffeurs, Truck Drivers, Parking Lot Attendants, Car Salesmen, Body and Fender Repairmen, and Auto Painters. Also in this group are inspecting of cars, not to mention the hundreds of occupations that deal with the manufacturing of automobiles.

The railroad industry employs about three-quarters of a million workers. The Locomotive Engineer is responsible for the operation of the train. The Fireman's responsibility is to make sure the locomotive is properly fueled, while the Conductor's obligation is to see that railroad trains are moved according to train orders. Brakemen have various functions from checking brakes and other train equipment to the use of flags and lights for signals.

Telegraphers, Telephonemen, and Towermen are responsible for controlling the movement of trains in accordance with instructions from the Train Dispatcher. The Trackmen build, maintain, and repair railroad tracks and roadways.

The familiar station agent is the official railroad representative at the station, while the Railroad Clerks handle the huge volume of paper work.

In the airplane industry, besides the familiar Pilot and Airline Stewardess, there are many other people concerned with the efficiency and safety of the flight. The Flight Engineer monitors the use of the varied mechanical and electrical devices aboard the plane. The Airplane Mechanic has the vital job of keeping the planes flying safely and efficiently. Air Controllers are responsible for safe air traffic, while Ground Radio Operators and Teletypists transmit weather conditions and other important information.

The water transportation industry offers occupations from a Ship's Captain to Deckhand. From the workers who construct ships, motorboats, etc., to the people who maintain, service, and operate water vehicles, plus the people who are responsible for the loading and unloading of cargo.

A whole new mode of transportation has developed as the Astronauts are beginning to blaze new trails in the area of space travel.

Listed below are some occupations from the transportation industry:

Armored Car Driver
Auto Assembler
Automotive Engineer
Automotive Parts Man
Auto Speedway Operator
Auto Slipcover Installer

Barge Captain
Brakeman
Conductor
Dispatcher
Dump Truck Driver
Ferryboat Operator

Furniture Mover
Longshoreman
New Car Inspector
Safety Engineer
Schedule Maker
Shipping Clerk

Stevedore
Ticket Agent
Traffic Manager
Travel Clerk
Travel Counselor
Travel Guide

SECTION VII

SUMMARY

Vocational Awareness is an on-going developmental process extending through the entire life span of each individual. The early school years are especially important because the experiences during this time play a significant role in laying the foundation upon which subsequent life and career decisions are based.

Teachers must become much more cognizant and appreciative of the nature of the early-school, career-related experiences provided for the pupil. Experiences during these formative years affect attitudes, values, interests and learning patterns that have a great impact on growth in vocational awareness and the general over-all development of the pupil. Opportunities that will contribute to broadening the pupil's understanding of himself in relation to his future career role, as a member of society, should be provided for each student throughout his entire school life.

Our schools have long supported the view that each individual should have equal opportunity to learn and that each pupil has the right of self-direction and choice. To fulfill this commitment the schools must be concerned with the development of the many facets of each pupil's total personality. This requires that opportunities be provided for vocational, as well as for personal, social, physical, emotional and academic development.

Although the basic text of this guidebook represents an effort to broaden current practices to include vocational awareness in the teaching of elementary school social studies, the appropriateness of the information and suggestions will vary from school to school and from teacher to teacher. The emphasis has been placed upon variety and flexibility of

approaches that might be used. Thus, as with any other text, the guide will be useful in direct proportion to the originality and initiative of the teacher who implements it through his teaching.

Reading, discussions, visits, audio-visuals, social interaction, role play, and all other media of human expression and involvement in the curriculum, that contribute to the development of the child's skill and knowledge, provide logical opportunities through which the teacher may incorporate the vocational awareness concept. While certain of the school experiences open avenues for growth in vocational awareness in readily recognizable forms, other experiences may be more difficult to identify and incorporate. A field trip where men may be observed doing work or where actual jobs are discussed in the textbook, may be seen as ways that easily lend themselves to opportunities that aid the youngster in understanding the various facets of vocational awareness. Most of the aspects of vocational awareness, however, appear in more subtle form so that a teacher must aid children in this development through creative instruction skill. This alertness on the part of the teacher might be expressed as his "stock in trade". Students' responses and reactions to questions and exercises serve to illustrate their feelings and attitudes as well as their fund of knowledge. The teacher who can "read" into these reactions and responses such facets of vocational awareness as; "understanding of relevancy of school to life and work," "appreciation of work and the people who do it," "knowledge of the importance of certain experiences and how they contribute to foundations for career planning," "ability to identify with a career role," etc., can make a more substantial contribution to the child's knowledge of the lesson and also his knowledge of himself than if the teacher were to address himself solely to the traditional textbook

content in the so-called traditional classroom style.

This teacher's guide has been prepared with the sincere hope that it will contribute to the solution of some of the problems related to helping pupils become self-sufficient and productive members of our society. It represents an initial venture, and as such, will undoubtedly encounter hurdles that may be overcome only by creative and courageous teachers working with new and imaginative concepts.

R E F E R E N C E S

1. Baldwin, A. L., Behavior and Development in Childhood (New York: Holt, Rinehart and Winston, Inc.) (1955)
2. Bruner, Jerome, The Process of Education (1960)
3. Carter, H. D., The Development of Vocational Attitudes, 4 Journal of Counseling Psychology (1940) 185-191
4. Feldman, Marvin J., The Ford Foundation, from Proceedings of a Conference, University of Wisconsin, 1968
5. Hunt, J. McVeigh, Intelligence and Exploration (1961)
6. Mowrer, O. H., Learning Theory and Behavior, New York: John Wiley and Sons, Inc. (1960)
7. Norris, Willa, Occupational Information in the Elementary School, Science Research Associates, Inc., 1963, Chicago
8. O'Hara & Tiedeman, The Vocational Self-Concept in Adolescent, 6 Journal of Counseling and Psychology (195) 292-301
9. Roe, Anne, Early Determinants of Vocational Choice, 4 Journal of Counseling Psychology (1957) 212-217
10. Super, Psychology of Careers, New York: Harper, 1963
11. Super, A Theory of Vocational Development, 8 American Psychology (1953)
12. Tyler, L. E., The Development of 'Vocational Interests': The Organization of Likes and Dislikes in Ten-Year Old Children, 86 Journal of Genetic Psychology (1955) 33-44
13. Tyler, L. E., The Relationship of Interests to Abilities and Reputation Among First Grade Children, 11 Educational and Psychological Measurement (1951) 255-264
14. White, Robert W., Motivation Reconsidered: The Concept of Competence, Psychology Review, 66, #5-293-333 (1959)

A D D E N D U M

The Division of Vocational Education has initiated special pilot projects specifically designed to explore and develop approaches that may contribute to the broad spectrum of experiences basic to career choices.

Funded under the Vocational Education Act Amendment-1968 allotments, reports of these projects planned for distribution include the following:

1. Vocational Awareness of Elementary School Children
2. Placement: A Guidebook for Counselors
3. The School-Community Coordinator
4. Audio-Visual Aids in Vocational Guidance and Counseling
5. Counselor-Teacher Coordination
6. Report of 1968/1969 Vocational Guidance Projects

It is hoped that these reports will be helpful to counselors, teachers, administrators, counselor and teacher educators in their respective functions in the field of education.

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